



UNITED STATES PATENT AND TRADEMARK OFFICE

[Handwritten signature]

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/600,921

06/20/2003

Louis J. Wardlaw III

002663/030490

6235

7590

11/28/2005

Beirne, Maynard & Parsons, L.L.P.
Ste. 2500
1300 Post Oak Blvd.
Houston, TX 77056-3000

EXAMINER

WEST, PAUL M

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/600,921	Applicant(s) WARDLAW, LOUIS J.	
	Examiner Paul M. West	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wardlaw, III (4,596,135) in view of Henry.

3. As to claims 1-3, Wardlaw teaches a method of detecting flaws in a weld, comprising: connecting a source 40 of pressurized gas composition to an injection port 28 in a wellhead 10 in fluid communication with the weld 22,24, said composition comprising a gas mixture including a marker sub-composition comprising a hydrocarbon (Col. 3, lines 60-66); injecting said pressurized gas composition through the injection port while the weld is at an elevated temperature (Col. 4, lines 10-16); monitoring the source of pressurized gas composition for detecting losses in pressure (Col. 4, lines 16-18); and passing a marker gas detector probe 50 over the weld for detecting the marker gas leaking through the weld (Col. 4, lines 21-24). Wardlaw does not teach the marker sub-composition hydrocarbon being non chlorine-containing. Henry teaches a method of detecting leaks by detecting traces of a composition comprising 1,1,1,2-tetrafluoroethane (Col. 2, lines 58-60) in gaseous form (Col. 3, lines 5-6), which is a non chlorine-containing hydrocarbon. It would have been obvious to one of ordinary skill in

Art Unit: 2856

the art at the time of the invention to combine the teachings of Henry with the method of Wardlaw because, as Henry teaches, use of chlorine-containing hydrocarbons or Refrigerant 12 causes damage to the ozone layer.

4. As to claim 4, Wardlaw teaches fluid communication being established between the pressurized gas composition and the weld while the temperature of the wellhead is at substantially 500 degrees F (Col. 3, lines 22-23; Col. 4, lines 10-13).


5. As to claims 5-8, Wardlaw teaches a system for detecting flaws in a weld, comprising: a source 40 of pressurized gas composition for connection to a wellhead injection port 28 establishing fluid communication between the source of pressurized gas composition and the weld 22,24; a gas detector probe 50 for detecting a hydrocarbon gas leaking through the weld; and wherein fluid communication is established between the pressurized gas composition and the weld while the weld is maintained at an elevated temperature for detecting flaws in the weld at the elevated temperature (Col. 4, lines 10-15). Wardlaw does not teach the probe detecting a non chlorine-containing hydrocarbon. Henry teaches a system for detecting leaks by using an ultra-violet light probe (Col. 3, lines 32-33) to detect traces of a composition comprising 1,1,1,2-tetrafluoroethane (Col. 2, lines 58-60) in gaseous form (Col. 3, lines 5-6), which is a non chlorine-containing hydrocarbon. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Henry with the method of Wardlaw because, as Henry teaches, use of chlorine-containing hydrocarbons or Refrigerant 12 causes damage to the ozone layer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul M. West whose telephone number is (571) 272-8590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800